

WHAT IS CLAIMED IS:

1. A memory integrated circuit comprising:
one or more data input/output terminals;
an input buffer register; and
5 a state decoder for receiving a chip select signal targeted for the memory integrated circuit; and
a bus switch having an input portion connected to said one or more data input/output terminals, and an output portion connected to said input buffer register, wherein the switch is an integral part of the memory integrated circuit, and wherein the memory integrated circuit is selectively decoupled from the bus in response to a change in state in the chip select signal.
- 10 2. A memory integrated circuit comprising:
a contact which connects to a data bus; and
a switch, wherein an input portion of said switch is connected to said
15 contact.
3. The integrated circuit of Claim 2 wherein an output portion of said switch is connected to one or more buffer registers.
4. A memory integrated circuit comprising:
one or more data input/output terminals;
an input buffer register; and
20 a bus switch having an input portion connected to said one or more data input/output terminals, and an output portion connected to said input buffer register; and
one or more control terminals for receiving memory access control
25 signals, and wherein said logic circuit is coupled to at least one of said one or more control terminals.
5. The memory integrated circuit of Claim 4, wherein said bus switch further comprises a control portion coupled to a logic circuit on said memory integrated circuit, where in said logic circuit is configured to selectively open said bus switch
30 during at least a portion of a memory access cycle.
6. The memory integrated circuit of Claim 4, wherein said memory integrated circuit further comprises one or more control terminals for receiving memory

access control signals, and wherein said logic circuit is coupled to at least one of said one or more control terminals.

7. A memory integrated circuit comprising:

one or more data input/output terminals;

5 an input buffer register; and

a bus switch having an input portion connected to said one or more data input/output terminals, and an output portion connected to said input buffer register, wherein the switch is an integral part of the memory integrated circuit; and

10 one or more control terminals for receiving memory access control signals, and wherein said logic circuit is coupled to at least one of said one or more control terminals.

8. A memory integrated circuit comprising:

one or more data input/output terminals;

15 an input buffer register;

a state decoder for receiving a chip select signal targeted for the memory circuit;

a bus switch having an input portion connected to said one or more data input/output terminals, and an output portion connected to said input buffer register, wherein the memory integrated circuit is selectively decoupled from the bus in response to a change in state in the chip select signal; and

20 one or more control terminals for receiving memory access control signals, and wherein said logic circuit is coupled to at least one of said one or more control terminals.

25 9. A method of transferring data, the method comprising:

disabling a transfer gate when no memory access are occurring;

enabling a transfer gate when memory accesses are occurring;

wherein enabling and disabling occur in a memory integrated circuit.

30 10. The method of Claim 9, wherein the memory integrated circuit additionally comprises a contact which connects to a data bus and a switch, wherein an input portion of said switch is connected to the contact, wherein an output portion of

said switch is connected to one or more buffer registers, the method further comprising, transferring data to and from the buffers subsequent to enabling the transfer gate.

- 5 11. A system for transferring data, the system comprising:
 means for disabling a transfer gate when no memory access are occurring;
 means for enabling a transfer gate when memory accesses are occurring;
 and
 wherein the means for enabling and the means for disabling reside within
 a memory integrated circuit.

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